

Neelam Turk**Professor**

Department of Electronics Engineering
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**BRIEF BIOGRAPHY**

Neelam Turk is working as Professor of Electronics Engineering Department with J.C.Bose University of Science and Technology, YMCA, Faridabad ,Haryana ,India. She has teaching experience of more than 21 years. She received her B.E., M.Tech. and Ph.D. degrees in 1998, 2002 and 2011 respectively .She has guided five Ph.Ds. and guiding two Ph.D. scholars. She has also guided more than thirty two M.Tech. Dissertations. Her research interest include MCSA, signal processing, Speech Processing, wireless communication, Wireless Sensor Networks ,Internet of Things(IoT). She has published more than 60 Papers in International Journals and Conferences. She is also member of several Professional bodies at National/International level.

QUALIFICATION

Ph. D. (2011)	Area: Signal processing, MCSA National Institute of Technology Kurukshetra (Haryana)
M.TECH(2002)	Electronics and Communication Engineering National Institute of Technology Kurukshetra (Haryana)
B.E(1998)	B. E. (Bachelor of Engineering) Electronics Engineering North Maharashtra University, Jalgaon (M.S.)

Research Interests:	MCSA, signal processing, Speech Processing, wireless communication, Wireless Sensor Networks ,Internet of Things(IoT)
TOTAL TEACHING EXPERIENCE:	24 years
RESEARCH PUBLICATIONS:	60 Papers
RESEARCH SUPERVISION:	
Ph.D Guided	05
Ph.D Guiding	02
M.TECH Dissertation Guided	32
M.TECH Dissertation Guiding	02
ADMINISTRATIVE EXPERIENCE:	
<ul style="list-style-type: none"> • Dean Faculty of Interdisciplinary Studies and Research from 18thMay 2023 to 17th May 2026. • Chairperson Centre for Energy Studies from 10th July 2023 to 9th July 2026. • Chairperson, Internal Complaints Committee cum women cell from 17th April 2023 to 16th April 2026. • Worked as NIRF Coordinator (NIRF-2024 and NIRF-2025) • Member, Board of Governance, Satyug Darshan Institute of Technology, Faridabad from 2021 to 2023 • Worked as Chairperson of Department of Electronics Engineering (Nov.2018 to Nov.2021) • Chairman, Board of Studies, Department of Electronics Engineering since Nov 2018 to Nov 2021. • Member of Central Purchasing committee (April2013 to March2014, April2015 to March 2017 and April 2020 to March 2022) • Member of student grievance cell (2018 to Jan 2022) • Member of Board of Faculty (BOF) (since 2015 to Nov.2021) • Worked as Dy. Controller of Examination(Oct-2017 to Jan 2019) • Member secretary of Board of Studies (BOS)(2012 to Nov.2018) • Worked as Dy. Proctor for Girls (May 2015 to May 2019) • Worked as Nodal officer NIRF (2016-2017) University ranking was under the slab(100 to 150) 	

- Worked as NIRF Coordinator (NIRF-2015 and NIRF-2016) University ranking was under the slab(150 to 200)
- Worked as NBA Departmental Coordinator for NBA EIC (2017)
- Member of Research Board Committee (2015-2017)
- Member of various selection committee at Govt./Private colleges as well as University level
- Co-Convener, University Convocation Committee in years 2016.
- Member, University Library Committee from year 2018 to till date.

MAJOR CONTRIBUTION:

- NBA Accredited for 3 years for branch Electronics and Communication Engineering. (1st July2019- 30 June2022)
- NBA Accredited extension for 1 year for branch Electronics and Instrumentation control (1st July2020- 30 June2021) as already NBA Accredited (1st July2017- 30 June2020)
- NBA Accredited extension for 3 years for branch Electronics and Instrumentation control (1st July2021- 30 June2024) as already NBA Accredited (1st July2017- 30 June2020)
- Organised FDP/Workshop/seminars/value added course for faculties and students of the department.

LIST OF RESEARCH PUBLICATIONS:

Paper Published in International Journals:

1. Priyanka, Neelam Turk, Ratna Dahiya, “Health Monitoring of Induction Motors through embedded systems- simulation of broker rotor bar fault and abnormal gear teeth fault”, 2020, *Microprocessors and Microsystems*, Elsevier, ISSN: 0141-9331, <https://doi.org/10.1016/j.micpro.2020.103077>
2. Vatsal Gupta, Sonam Khera, Neelam Turk, “MQTT protocol employing IOT based home safety system with ABE encryption”. International journal of multimedia tools and applications. Springer, ISSN: 1380-7501, (2020), DOI 10.1007/s11042-020-09750-4
3. Chhaya Grover, Neelam Turk, “Optimal Statistical Feature Subset Selection for Bearing Fault Detection and Severity Estimation”, Journal of Shock and Vibration, ISSN:1875-9203, 2020, <https://doi.org/10.1155/2020/5742053>

4	Sonam Khera, Neelam Turk, Navdeep Kaur, "A practical approach to energy consumption in wireless sensor networks", Journal of Advanced Intelligence Paradigms, ISSN 1755-0394, Vol16 N0.2,pp190-201 ,year 2020, DOI: 10.1504/IJAIP.2018.10009335
5	Sonam Khera, Neelam Turk, Navdeep Kaur "Enhancing Network Coverage using Handoff Techniques in Mobile Wireless Sensor Networks", International Journal of Future Generation Communication & Networking (IJFGCN) under SERSC Australia. ISSN 2233-37857 Vol. 10, No. 10, pp.23-32, 2017, http://dx.doi.org/10.14257/ijfgcn.2017.10.10.02
6	Kalpana Sheokand, Neelam Turk, "Behaviour Analysis of Induction Motor Under Various Fault Conditions of Rotor bar at Different Loading", International Journal of Computer Sciences and Engineering, ISSN:2347-2693Vol.6, No.2, pp.18-24, 2018.
7	Kalpana Sheokand, Neelam Turk, Detection of Air gap eccentricity faults using Finite Element Analysis (FEA) in BLDC Motors, Trends in Mechanical Engineering, ISSN: 0976-3104 Volume 8, No. 2, pp. 1-4, 2018
8	Priyanka, Neelam Turk, Ratna Dahiya, "The effectual review on fault detection and classification in Induction Motor", International Refereed Journal of Reviews and Research, ISSN:2348:2001Vol.6, Issue 2, pp. 41-49, 2018.
9	Kalpana Sheokand, Neelam Turk, "Fault Diagnosis Of Induction Motor Under Various Fault Conditions of Stator Winding at Different Loading Level", International Journal of Modern Electronics and Communication Engineering , ISSN:2321-2152 Vol.6, No.2, pp.24-29, 2018.
10	Kalpana Sheokand, Neelam Turk, "A Review on Various Faults and Fault Diagnosis of Induction Motor, Trends in Mechanical Engineering & Technology", ISSN:2231-1793,Vol. 8, no. 2, 2018
11	Kalpana Sheokand, Neelam Turk , "Detection of Eccentricity Fault for Induction Motor, Trends in Electrical Engineering", ISSN:2321-4260, Vol. 8, no. 2, pp. 19-32, 2018
12	Kalpana Sheokand, Neelam Turk, "Brief review of fault detection and classification in Induction Motor", Trend in Mechanical Engineering and Technology, ISSN:2347-9965 ,Vol.10, no. 1 pp.1-6, 2019
13	Gunjan Sardana, Neelam Turk, Satvir Deswal "Detection of Stator winding Faults using Finite element analysis (FEA) in BLDC Motors", International Refereed Journal of Reviews and Research, ISSN:2348:2001, Volume 6, No.2, pp. 50-58, 2018

14	Gunjan Sardana, Neelam Turk, Satvir Deswal "Healthy BLDC motor simulation using Finite Element Analysis, International Journal of Advance Engineering and Research development", ISSN: 2348-4470, Vol. 4, no.10, pp. 272-283, 2017.
15	Kalpana Sheokand, Neelam Turk "Condition Monitoring of Induction Motors through simulation of bearing fault and air gap eccentricity", International Journal Recent Technology and Engineering ISSN:2277-3878, Volume-8 Issue-3, pp. 176-193, September 2019
16	Gunjan Sardana, Neelam Turk, Satvir Deswal "Eccentricity fault diagnosis in BLDC motor using finite element and frequency research", International Journal of Recent Technology and Engineering, ISSN:2277-3878, Volume-8, Issue-2, pp. 9-14, 2019
17	Chhaya Grover, Neelam Turk, "Rolling Element Bearing Fault using Empirical Mode Decomposition and Hjorth Parameters "Journal of Procedia of Computer Science, ISSN: 1877-050, Vol.167 (2020) pp 1484-1494
18	Neelam Turk, Ratna Dahiya, "An Approach of Condition Monitoring of Induction Motor Using MCSA", International Journal of Systems Applications, Engineering & Development, ISSN: 2074-1308 Volume 1, Issue 1, pp. 13-17.
19	Neelam Turk, Ratna Dahiya "Motor Current Signature Analysis and its Applications in Induction Motor Fault Diagnosis", International Journal of Systems Applications, Engineering & Development, ISSN: 2074-1308. ,Volume 2, Issue 1, pp. 29-35, 2007
20	Neelam Turk, Ratna Dahiya "Condition monitoring methods, failure identification and analysis for Induction machines", International Journal of Circuits Systems and Signal Processing, ISSN: 1998-4464, Volume 3, Issue 1, pp. 29-35, 2009.
21	Neelam Turk, Ratna Dahiya "Rotor fault detection in induction motor by wavelet analysis, " International Journal of Engineering, Science and Technology, ISSN:0975-5462, Volume 1, Issue 3, pp.90-99, 2009
22	Neelam Turk, Ratna Dahiya, "Detection of Bearing Faults of Induction Motor Using Park's Vector Approach", International Journal of Engineering and Technology, ISSN:0975-4024, Volume 2, Issue 4, pp.263-266, 2010.
23	Neelam Turk, Ratna Dahiya "Diagnosis of Rotor Fault of Induction Motor Using FFT Based Power Spectrum", International Journal on Electronics & Electrical Engineering, ISSN: 0974-2042, Vol.11, no.1, pp. 33-48, 2010.

24	Priyanka, Neelam Turk, Ratna Dahiya "Magnetic Field Analysis for Health monitoring of induction motor using search coil. International Journal of Computing and Corporate research, ISSN: 2249-054X, Vol. 3, No.1, 2013
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Paper Published in National and International Conferences:	
1.	Neelam Mehala, Ratna Dahiya "An approach of condition monitoring of induction motor using MCSA", National conference on Control and Instrumentation, pp. II-1-4., Dec. 29-30, 2007, National Institute of Technology, Kurukshetra (Haryana),
2.	Neelam Mehala, Ratna Dahiya "An experimental study for diagnosis of bearing faults of Induction motor", National Conference on Emerging Computing Technologies, pp. 229-237. Oct, 30, 2010, ITS Institute, Ghaziabad
3	Sonam Khera, Neelam Turk, Navdeep Kaur, "Future Approach to Mobile Communication Technology" Symposium on Nano-Technology: Interdisciplinary Aspect", 12 Dec- 2012, YMCA University of Science and Technology, Faridabad
4	Gunjan Sardana, Neelam Turk, Satvir Deswal "Fault identification of BLDC Motor using Signal Processing Techniques", National Conference on 'Science in Media Dec. 3-4, 2012, YMCA University of Science and Technology, Faridabad,
5	Sonam Khera, Neelam Turk, Navdeep Kaur "Wireless Sensor Networks Security Issues" ISTE Sponsored Workshop on Nano Technology and Embedded System, 23 July-3 Aug 2012, YMCA University of Science and Technology, Faridabad
6	Neelam Mehala, Ratna , "Spectral Analysis for Fault Diagnosis of Induction Machines" 17 th National Power System Conference, 12-14 Dec. 2012, Department of Electrical Engineering, Indian Institute of Technology (BHU)
7	Neelam Mehala, "Gear Fault Detection in Gear Boxes using Current Signature Analysis." National Conference on Emerging Trends in Mechanical Engineering, 27-28 July 2012. Ajay Kumar Garg Engineering College, Ghaziabad (U.P.)
8	Neelam Mehala, "Bearing Fault Detection in Machinery using Current Signature Analysis." National Conference on Emerging Trends in Mechanical Engineering, 27-28 July 2012. Ajay Kumar Garg Engineering College, Ghaziabad (U.P.)
09	Neelam Mehala, "Critical Issues in Designing of Mechatronics System", National Conference on Innovative Ideas in Engineering and Management, June 8-9, 2012. Manav Bharti University, Solan (Himachal Pradesh)

10	Neelam Mehala, "Computer aided condition monitoring of induction motor: An experimental study, National conference on microwave, antenna and signal processing, pp. 294-297. April ,22-23, 2011,ITS Engineering college, Greater Noida, (UP)
11	Neelam Mehala, "Condition monitoring of induction motor using MCSA: An experimental study", National Conference on Emerging Computing Technologies, pp.249-258. ,Oct, 30, 2010,ITS Institute, Gaziabad (UP)
12.	Neelam Mehala, "Condition monitoring of electrical machine using Gabor Transform, National conference on microwave, antenna and signal processing", pp. 81-83. ,April ,22-23, 2011,ITS Engineering college, Greater Noida, (UP),
13	Neelam Mehala, "Energy efficiency of wireless sensor networks" International conference on Emerging Trend in Engineering and Management, 23-24 June 2012,Satpriya Group of Institutions, Rohtak (Haryana),
14	Neelam Mehala, "Fault diagnosis of Centrifugal Pumps using spectral analysis". International conference on Emerging Trend in Engineering and Management, , Rohtak (Haryana), 23-24 June 2012.Satpriya Group of Institutions
15	Neelam Mehala, "Computer aided Fault Diagnosis Methods for Induction Motor". International Conference on Advanced Computing Technologies, 8-9 June 2012,Gurukul Vidyapeeth Institute of Engineering and Technology, Patiala (Punjab),.
16	Neelam Mehala, "Pattern Recognition Techniques for Fault Diagnosis of Electric Machine" International Conference on Advanced Computing Technologies, (Punjab. ,8-9 June 2012,Gurukul Vidyapeeth Institute of Engineering and Technology, Patiala
17	Neelam Mehala, Ratna Dahiya, "Modeling of mechatronics systems." International conference on recent developments in mechanical engineering, , pp.673-682. Jan. 23-25, 2008, SUS college of Engineering, Mohali (Punjab),
18	Neelam Mehala, Ratna Dahiya, "A Comparative Study of FFT, STFT and Wavelet Techniques for Induction Machine Fault Diagnostic Analysis, International conference on computational intelligence, Man machine systems and cybernetics, pp. 203-208, Dec.,29-31, 2008Cario, Egypt
19	Neelam Mehala, Ratna Dahiya "Motor Current Signature Analysis and its Applications in Induction Motor Fault Diagnosis", International conference on Signal Processing, Robotics and Automation (ISPRA-08), pp. 442-448, Feb. 20-22, 2008, Cambridge, UK
20	Sunanda Mendiratta, Neelam Turk ,Dipali Bansal, "Automatic Speech Recognition By Cuckoo Search Optimization Based Artificial Neural Network Classifier", IEEE International Conference on Soft Computing Techniques and Implementations (ICSCTI 2015), October 8-10, 2015, Manav Rachna, University, Faridabad (Haryana)

21.	Sunanda Mendiratta, Neelam Turk, Dipali Bansal, "Automatic Speech Recognition Using Optimal Selection of Features Based On Hybrid ABC-PSO,IEEE International Conference on Inventive Computation Technologies (ICICT 2016). August 26-27, 2016Coimbatore, India
22	Nirmal Kaushik, Neelam Turk Estimate bit error rate of digital modulation techniques, National conference on Role of Science and Technology towards 'Make in India', March, 05-07, 2016, YMCAUST, Faridabad Haryana
23	Gunjan Sardana, Neelam Turk, Satvir Deswal "Fault identification of BLDC motor using signal processing techniques: A Review", National conference on Role of Science and Technology towards 'Make in India', March, 05-07, 2016, YMCAUST Faridabad Haryana
24	Sunanda Mendiratta, Neelam Turk, Dipali Bansal, "A Review on speech recognition for man machine interaction", National conference on Role of Science and Technology towards 'Make in India', March, 05-07, 2016, YMCAUST, Faridabad, Haryana
25	Deepa Goyal, Neelam Turk, "An efficient approach towards image stitching", National conference on Role of Science and Technology towards 'Make in India' March, 05-07, 2016, YMCAUST, Faridabad Haryana
26	Kalpana Sheokand, Neelam Mehala, "LabView based modeling and simulation of Induction machines, National conference on Role of Science and Technology towards" 'Make in India', March, 05-07, 2016, YMCAUST, Faridabad Haryana